

REMARKS

1. Applicant thanks the Examiner for the Examiner's comments which have greatly assisted Applicant in responding.

2. 35 U.S.C. § 103(a). The Examiner has rejected Claims 1-11, 14-15, 18-20, 22-24, 29-30, and 33-35 under 35 U.S.C. §103(a) as being unpatentable over Hutson (5,559,940).

Applicant respectfully disagrees.

Claims 1, 14, 20, 24, and 30 appear as follows:

1. A method of transforming and canonicalizing semantically structured data, the method comprising:

obtaining data from a network of computers;

applying text patterns to the obtained data and placing the data in a first data file;

providing a second data file containing the obtained data in a uniform format; and

generating user interface specific grammatical sentences from the data in the second data file.

14. A system of transforming and canonicalizing semantically structured data, the system comprising:

means for obtaining data from a network of computers;

means for applying text patterns to the obtained data and placing the data in a first data file;

means for providing a second data file containing the obtained data in a uniform format; and

means for generating user interface specific grammatical sentences from the data in the second data file.

20. A method of taking data from one format to any of a variety of interface dependent formats, the method comprising:

- obtaining data from a network of computers;
- creating a first data file with the obtained data in a first format; and
- generating grammatical phrases from the converted obtained data, the generated grammatical phrases being in a second format associated with a user interface.

24. A system of taking data from one format to any of a variety of interface dependent formats, the system comprising:

- means for obtaining data from a network of computers;
- means for creating a first data file with the obtained data in a first format;
- and
- means for generating grammatical phrases from the converted obtained data, the generated grammatical phrases being in a second format associated with a user interface.

30. A computer program product comprising computer readable program code for taking data from one format to any of a variety of interface dependent formats, the program code in the computer program product comprising:

- first computer readable program code for obtaining data from a network of computers;
- second computer readable program code for creating a first data file with the obtained data in a first format; and
- third computer readable program code for generating grammatical phrases from the converted obtained data, the generated grammatical phrases being in a second format associated with a user interface.

In particular, Hutson does not teach, suggest, or contemplate a system that generates user interface specific grammatical sentences from the data in the second data file as claimed in the invention.

The Office Action states that Hutson discloses "generating grammatical sentences from the data in the second data file, see (col. 2, lines 6-28; col. 5, lines 3-34; col. 7, lines 44-63)." However, Hutson does not disclose what the Office Action assumes. Hutson creates a multi-dimensional matrix that contains textual information in a compressed historical database formed singular vectors are analyzed further to determine, analyze, and identify semantic, lexical, and/or textual constructs of interest. Selected singular vectors may be compared with prior results, or be "searched," for example, in the form of a database query. (col. 2, lines 13-64)

The purpose of Hutson's multi-dimensional matrix is for:

"A multi-dimensional processing and display system that is used with equal data to provide a system by which large volumes of such textual data may be efficiently sorted and searched." (Abstract)

Hutson does not form grammatical sentences from the data in the second data file. Hutson does not contemplate such a function because Hutson is only concerned with the ability to search the multi-dimensional matrix.

Further, Hutson does not contemplate the ability to generate user interface specific grammatical sentences from the data in the second data file. The Office Action states that, "... Hutson teaches that user can review the visual representation and the screen display includes cursors, which allow a user to freely travel (col. 7, lines 44-63)." This is, however, **not** what is claimed in the invention. Hutson has a user interface that is used to display all or portions of the enhanced multi-dimensional matrix. (Abstract)

The invention as claimed **generates** grammatical sentences for specific user interfaces from the data in the second data file. In an opposite fashion, Hutson only

provides a user interface that is used to display all or portions of the enhanced multi-dimensional matrix.

A unique feature of the invention is that the invention generates grammatical sentences from data in the second data file that is customized for specific user interfaces such as voice, WAP, etc. The Specification on Pages 42-43 describe this feature:

"FIGURE 29 is a functional diagram 2900 illustrating the transformation of data from database 170 to a user of voice portal 10 via some user interface platform (e.g., WAP, Web, phone, ASR, TTF). Data contained in data structure 2860 (shown also in FIGURE 29) is put in a parsed form in a data structure 2910 by applying rules 2915 with attribute phrase grammars for normalized and tagged data. Attribute phrase grammars take normalized and tagged data to create sensible phrases which include the attributes identified. Data from data structure 2910 is then placed in data structure 2920 by applying a term substituted form using rules 2920 containing lexical entry transformation tables. In the exemplary embodiment, the lexical entry transformation tables of rules 2920 list the data output structure corresponding to a particular interface. For example, the term "route" is transformed into "Rt." for WAP applications and transformed into "Route" for telephone applications using speech. Similarly, the term "U.S." is transformed into "U.S." for WAP applications and to "you ess" for phone applications using speech.

Data from data structure 2920 is placed in a re-arranged form in a data structure 2930 by applying rules 2935 in which term replacement rules are applied, depending on the output device used. Term rearrangement rules move terms around to the arrangement which best suits different user interfaces. Data in data structure 2930 is then placed in a data structure 2940 in which sentences are generated by applying rules 2945 which include phrase generation grammars. For example, a sentence may be generated which says "< severity > traffic incident between <cross location> and <cross location> on <main road>." Once data is in the format of data structure 2940, it is prepared for a variety of output interfaces, such as, WAP, Web, phone, and ASR."

It is clear that Hutson does not contemplate a system as claimed in the invention. Hutson is simply a searchable database.

Therefore, Hutson does not teach or disclose the invention as claimed.

Claims 1, 14, 20, 24, and 30 are in allowable condition. Claims 2-11, and 15, 18-19, and 22-23, and 29, and 33-35 are dependent upon Claims 1, 14, 20, 24, and 30, respectively. Therefore, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

3. 35 U.S.C. § 103(a). The Examiner has rejected Claims 12-13, 16-17, 21, 25-26, and 31-32 under 35 U.S.C. §103(a) as being unpatentable over Hutson (5,559,940) in view of Barry et al. (6,308,156).

The rejection of Claims 12-13, 16-17, 21, 25-26, and 31-32 under 35 U.S.C. §103(a) is deemed moot in view of Applicant's comments concerning Claims 1, 14, 20, 24, and 30, above. Claims 12-13, and 16-17, and 21, and 25-26, and 31-32 are dependent upon Claims 1, 14, 20, 24, and 30, respectively, which are in allowable condition. Therefore, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

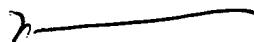
4. 35 U.S.C. § 103(a). The Examiner has rejected Claims 27 and 28 under 35 U.S.C. §103(a) as being unpatentable over Papierniak et al. (6,151,601) in view of Gershman et al. (6,356,905).

The rejection of Claims 27 and 28 under 35 U.S.C. §103(a) is deemed moot in view of Applicant's comments concerning Claims 1, 14, 20, 24, and 30, above. Claims 27 and 28 are dependent upon Claim 24, which is in allowable condition. Therefore, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

CONCLUSION

Based on the foregoing, Applicant considers the present invention to be distinguished from the art of record. Accordingly, Applicant earnestly solicits the Examiner's withdrawal of the rejections raised in the above referenced Office Action, such that a Notice of Allowance is forwarded to Applicant, and the present application is therefore allowed to issue as a United States patent.

Respectfully Submitted,



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